



# United States Department of the Interior

## BUREAU OF RECLAMATION

Washington, D.C. 20240


IN REPLY REFER TO:

**JUL 1 2002**

W-2000  
PRJ-2.00

### MEMORANDUM

To: Secretary

From: Michael R. Gabaldon   
Secretary Designee and Chairman, Glen Canyon Dam Adaptive  
Management Program

Subject: Report and Recommendations to the Secretary of the Interior from the Glen  
Canyon Dam Adaptive Management Program Federal Advisory Committee

The Glen Canyon Dam Adaptive Management Work Group met on April 17-18, 2002, to discuss actions taken to meet responsibilities under the Federal Advisory Committee Act (FACA), the Grand Canyon Protection Act, and the Glen Canyon Dam Environmental Impact Statement Record of Decision. As your designee and chairman, and in accordance with the group's charter under the FACA, the following recommendation is hereby formally transmitted:

"GCDAMP (Glen Canyon Dam Adaptive Management Program) should adopt an experimental framework that includes Scenarios 1 through 4<sup>1</sup> and possibly other scenarios to benefit resources of concern with a twice-a-year evaluation of data by the AMWG (Adaptive Management Work Group).

Implement Scenario 1, 3, or 4, as appropriate in Water Year 2002-2003. Scenario 1 will be implemented in the first year that fall tributary inputs occur. Scenario 2 will be implemented in the next year that fall tributary inputs occur.

---

<sup>1</sup> By way of definition, Scenario 1 consists of alternating 2-week periods of low steady flows (8,000 cfs) and low fluctuating flows (6,500 to 9,000 cfs) from September to January in a year in which a fall sediment input occurs, followed in January by a beach habitat building flow (41,000 cfs) similar to that which occurred in 1996, followed in January through March by highly fluctuating flows (5,000 to 25,000 cfs).

Scenario 2 is identical to Scenario 1, except that the September to January flows would consist of moderately fluctuating flows (5,000 to 10,000 cfs) allowed under the current Glen Canyon Dam EIS Record of Decision.

Initiate all needed activities (consultation [include endangered Humpback chub], compliance, development of a science plan, public outreach, development of a captive breeding population of Humpback Chub from Grand Canyon).

Direct that GCMRC (Grand Canyon Monitoring and Research Center) in consultation with the TWG (Technical Work Group) and the SAs (Science Advisors) develop an experimental plan for long-term implementation."

As you are aware, the Glen Canyon Dam AMWG also made five recommendations at a previous meeting, held on January 16-17, 2002. I would like to take this opportunity to formally transmit these recommendations:

Recommendation 1 - "Recommend the (Adaptive Management Program) Strategic Plan to the Secretary of the Interior as adopted and as amended with the language changes made today."

Recommendation 2 - "In support of Goal 2 (of the Strategic Plan), the AMWG (Adaptive Management Work Group) recommends the following actions subject to environmental compliance to include assessing recreational use, ESA (Endangered Species Act), in consultation with the tribes and other affected state agencies.

1. Evaluate methods to remove non-native fish, except rainbow trout, from Bright Angel Creek in 2002.
2. Evaluate methods to remove non-native fish from the LCR (Little Colorado River) in 2002.
3. Gather public input and conduct public education and environmental compliance on long-term removals in #1 and 2 above.

---

Scenario 3 consists of a year in which fall sediment inputs do not occur. Dam releases would consist of normal operations allowed under the Glen Canyon Dam EIS Record of Decision through December followed in January through March by highly fluctuating flows (5,000 to 25,000 cfs). If a sediment input occurs during this high fluctuating flow period, a beach habitat building flow would be immediately released.

Scenario 4 consists of a year in which no significant sediment inputs occur. Dam releases would consist of normal operations allowed under the Glen Canyon Dam EIS Record of Decision through December followed in January through March by highly fluctuating flows (5,000 to 25,000 cfs).

In all scenarios, dam releases after the high fluctuating flow period of January through March would consist of normal operations allowed under the Glen Canyon Dam EIS Record of Decision.

4. Establish a TWG (Technical Work Group) ad hoc committee to develop a 2002-2006 research monitoring and management work plan for meeting MO (Management Objective) 2.5 and 2.6 of the August 17, 2001, Draft of the AMP (Adaptive Management Program) Strategic Plan. The TWG will report back to the AMWG at the next meeting.
5. Using data from #1-4 above to make recommendations on future removal."

Recommendation 3 - "The AWMG concurs with the findings of the TWG white paper on sediment."

"In concert with RPA [Reasonable and Prudent Alternative of the biological opinion] flows for native fish, during 2002-2003 request that the GCMRC [Grand Canyon Monitoring and Research Center], in consultation with the TWG, design an experimental flow sequence that tests hypotheses for conservation of sediment. Report to AMWG in April 2002 on the proposed flow sequence."<sup>2</sup>

Recommendation 4 - "Incorporate KAS (Kanab ambersnail) recommendations from TWG as outlined in presentation paper."

Recommendation 5 - "Approve the FY 2003 Budget (\$9,904,000)"

The next meeting of the Adaptive Management Work Group will be held on July 17-18, 2002, in Phoenix, Arizona. Agenda items will likely include the Fiscal Year 2004 work plans, a proposal to construct a selective withdrawal structure on Glen Canyon Dam, and more detailed discussion on the April experimental flow proposal which is intended to conserve sediment and benefit endangered fish. I will forward any recommendations that may result from the July meeting.

---

<sup>2</sup> This recommendation lead to development and adoption of the recommendation adopted at the April 17-18, 2002 meeting.

cc: Assistant Secretary, Water and Science, ms6640-MIB, Washington, DC  
Attention: Bennett Raley

Assistant Secretary, Fish and Wildlife & Parks, ms3012-MIB, Washington, DC  
Attention: Joseph Doddridge

Assistant Secretary, Indian Affairs, 4160 ms4140-MIB, Washington, DC  
Attention: Neal McCaleb

Deputy Assistant Secretary, Policy, Management and Budget, 6117 ms1418-MIB,  
Washington, DC Attention: Chris Kearney

Commissioner, Bureau of Reclamation, ms7654-MIB, Washington, DC  
Attention: John W. Keys, III

Deputy Director, U.S. Geological Survey, 7A412 ms100A-RstnVa, Reston VA  
Attention: Kathryn R. Clement

Deputy Director, National Park Service, 3112 ms3316-MIB, Washington, DC  
Attention: Denis Galvin

Deputy Director, Fish and Wildlife Service, 3256 ms3012-MIB, Washington, DC  
Attention: Marshall Jones

Deputy Commissioner, Bureau of Indian Affairs, ms4140-MIB, Washington, DC  
Attention: Sharon Blackwell

Assistant Director, Wildlife Management, Arizona Game & Fish  
Department, 2221 W. Greenway Road, Phoenix, AZ 85023-4399  
Attention: Bruce Taubert

Bureau of Indian Affairs, PO Box 10, Phoenix, AZ 85001  
Attention: Ms. Amy L. Hcuslein

Western Area Power Administration, PO Box 11606, Salt Lake, City, UT 84111  
Attention: Clayton Palmer

The Hualapai Tribe, PO Box 179, Peach Springs, AZ 86434  
Attention: Loretta Jackson

Director, Cultural Preservation Office, The Hopi Tribe,  
P.O. Box 123, Kykotsmovi, AZ 86039  
Attention: Leigh Kuwanwisiwma

Superintendent, National Park Service, Grand Canyon National Park,  
PO Box 129, Grand Canyon, AZ 86023  
Attention: Joe Alston

Navajo Nation Inn Office Complex, PO Box 4950, Window Rock, AZ 86515-4350  
Attention: Robert Begay

Pueblo of Zuni, PO Box 339, Zuni, NM 8732  
San Juan Southern Paiute Tribe, PO Box 2656, Tuba City, AZ 86045  
Attention: Arden Kucate

Southern Paiute Indian Consortium, Kaibab Paiute Indian  
Reservation, Tribal Affairs Bldg., HC 65 Box 2, Fredonia ,AZ 86022  
Attention: Arden Kucate

State Supervisor, U.S. Fish and Wildlife Service, Arizona  
Ecological Services Office, 2321 W. Royal Palm Road, Suite 103,  
Phoenix, AZ 85021-4951  
Attention: David Harlow

Arizona Department of Water Resources, Office of Colorado  
River Management, 500 N. Third Street, Phoenix, AZ 85004-3921  
Attention: Perri Benemelis

Executive Director, Colorado River Board of California,  
770 Fairmont Avenue, Suite 100, Glendale CA 91203-1035  
Attention: Gerald R. Zimmerman

Colorado Water Conservation Board, 1313 Sherman Street, Room 718,  
Denver CO 80203-2279  
Attention: Rod Kuharich

Colorado River Commission of Nevada, 555 E. Washington Avenue,  
Suite 3100, Las Vegas, NV 89101-1048  
Attention: Phillip S. Lehr

New Mexico State Engineer's Office, PO Box 25102,  
Santa Fe, NM 87504  
Attention: Thomas C. Turney

Interstate Streams Engineer, Herschler Building, 4-E, 122 W. 25<sup>th</sup> Street,  
Cheyenne, WY 82002  
Attention: John Shields

Director, Division of Water Resources, PO Box 146201,  
Salt Lake City UT 84114-6201  
Attention: D. Larry Anderson

Executive Director, Southwest Rivers, 2690  
E. Hemberg Dr., Flagstaff, AZ 86001  
Attention: Pam Hyde

President, Grand Canyon Trust, 2601 North Fort Valley Road  
Flagstaff, AZ 86001  
Attention: Geoffrey S. Barnard

Arizona Flycasters/Trout Unlimited, 839 S. Westwood, Suite 266,  
Mesa AZ 85201-3467  
Attention: Dave Cohen

Grand Canyon River Guides, PO Box 1934, Flagstaff, AZ 86002  
Attention: Andre Potochnik

Colorado River Energy Distributors Association, 4625 S. Wendler Drive,  
Suite 111, Tempe, AZ 85282  
Attention: Leslie James

Utah Associated Munciple Power Systems, 2825 E. Cottonwood Parkway,  
Suite 200, Salt Lake City, UT 84121  
Attention: Ted Rampton

Regional Director, Upper Colorado Regional Office,  
125 South State Street, Salt Lake City UT 84138  
Attention: Rick L. Gold

bc: Secretary's Surname  
Secretary's Reading File (2)  
AS/WS (3)

Department of the Interior, Committee Management Officer  
Attention: 7229-MIB (Bish)

Regional Director, Salt Lake City, UT, Attention: UC-100, UC-700, UC-702, UC-703  
Field Solicitor, Salt Lake City, UT

W-6000, W-6700, W-2000, W-3000, W-5010, W-1110, W-6330, W-1125  
D-7924, D-7900, W-6334, W-6330,

WBR: Ckaras/ac/6-21-02/J:dec and April recommendations.DOC/#2000885/PRJ-2.00  
Revised:Mgabaldon:cd:7/2/02